

# Bootstrap



# What is Twitter Bootstrap?

- A 'framework' for web interface design
- A Software Development Kit (SDK) for front-end design.
- Easily modifiable styles and scripts
- Free and open-source
- A 'widely-adopted standard'



# Created By



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@fat

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San Francisco, CA



# Technologies used



## Twitter Bootstrap

combines  
HTML , CSS & JavaScript  
into an **'easy-to-use'** &  
**'rapid deployment'**  
framework

HTML  
/ HTML 5

CSS / CSS3  
/ LESS

JavaScript  
/ jQuery



# Why

## Reason #1: Rich Features

### Designed for everyone, everywhere.

Need reasons to love Bootstrap? Look no further.



#### Built for and by nerds

Like you, we love building awesome products on the web. We love it so much, we decided to help people just like us do it easier, better, and faster. Bootstrap is built for you.



#### 12-column grid

Grid systems aren't everything, but having a durable and flexible one at the core of your work can make development much simpler. Use our built-in grid classes or roll your own.



#### Growing library

Despite being only 10kb (gzipped), Bootstrap is one of the most complete front-end toolkits out there with dozens of fully functional components ready to be put to use.



#### HTML5

Built to support new HTML5 elements and syntax.



#### CSS3

Progressively enhanced components for ultimate style.



#### For all skill levels

Bootstrap is designed to help people of all skill levels—designer or developer, huge nerd or early beginner. Use it as a complete kit or use to start something more complex.



#### Responsive design

With Bootstrap 2, we've gone fully responsive. Our components are scaled according to a range of resolutions and devices to provide a consistent experience, no matter what.



#### Custom jQuery plugins

What good is an awesome design component without easy-to-use, proper, and extensible interactions? With Bootstrap, you get custom-built jQuery plugins to bring your projects to life.



#### Cross-everything

Originally built with only modern browsers in mind, Bootstrap has evolved to include support for all major browsers (even IE7!) and, with Bootstrap 2, tablets and smartphones, too.



#### Styleguide docs

Unlike other front-end toolkits, Bootstrap was designed first and foremost as a styleguide to document not only our features, but best practices and living, coded examples.



#### Built on LESS

Where vanilla CSS falters, LESS excels. Variables, nesting, operations, and mixins in LESS makes coding CSS faster and more efficient with minimal overhead.



#### Open-source

Built for and maintained by the community via [GitHub](#).



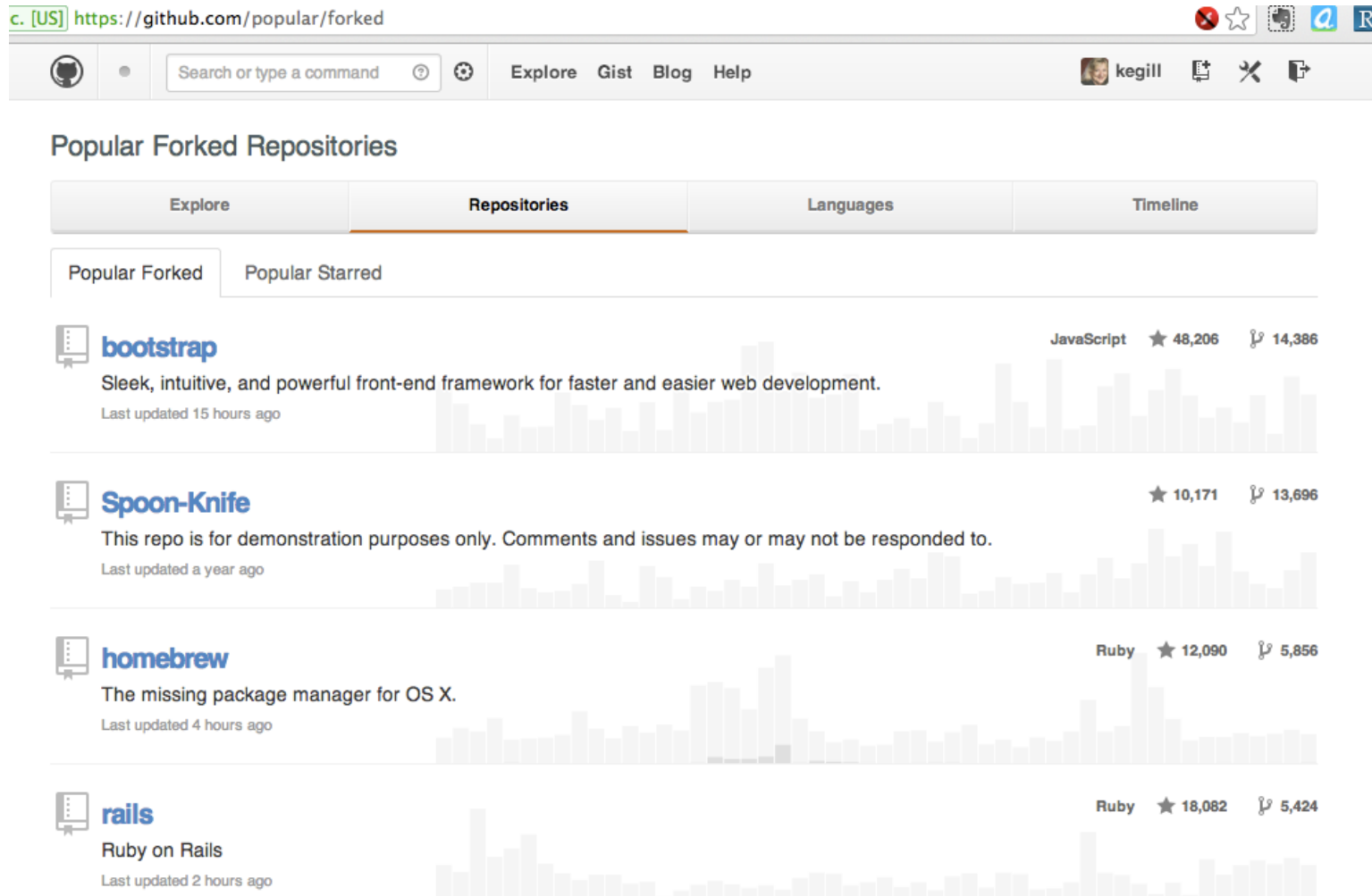
#### Made at Twitter

Brought to you by an experienced [engineer](#) and [designer](#).



# Why

## Reason #2: Popularity



# Why

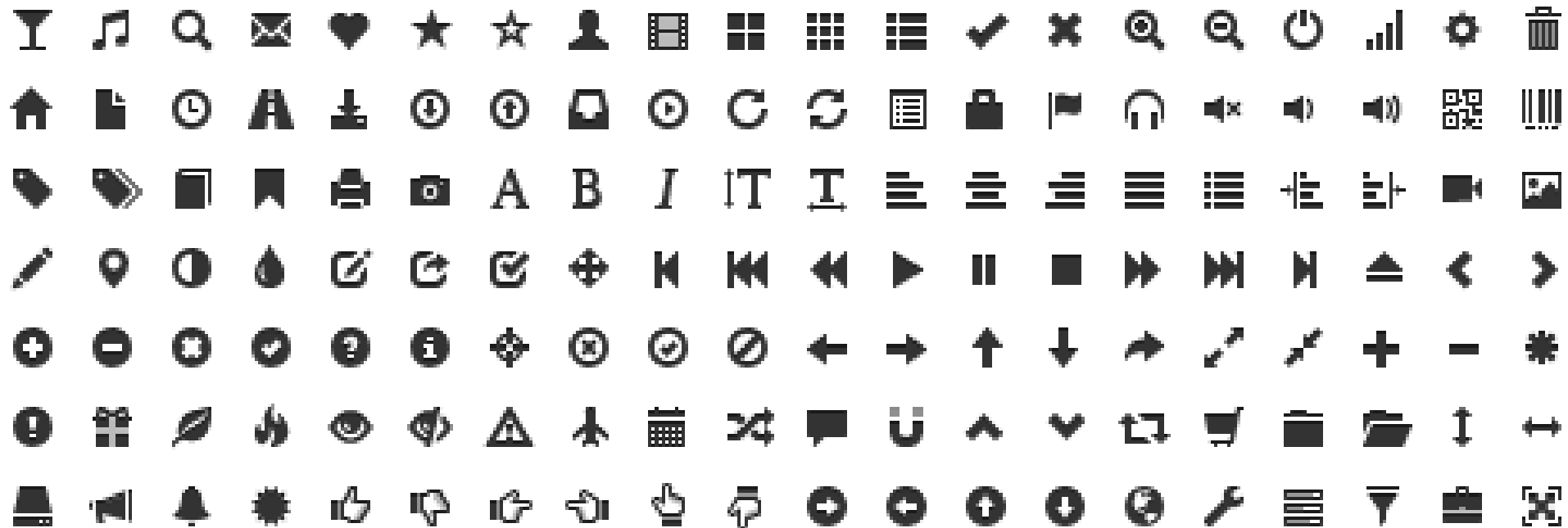
Reason #3: Browser Support

## Also MSIE and Opera



# Why

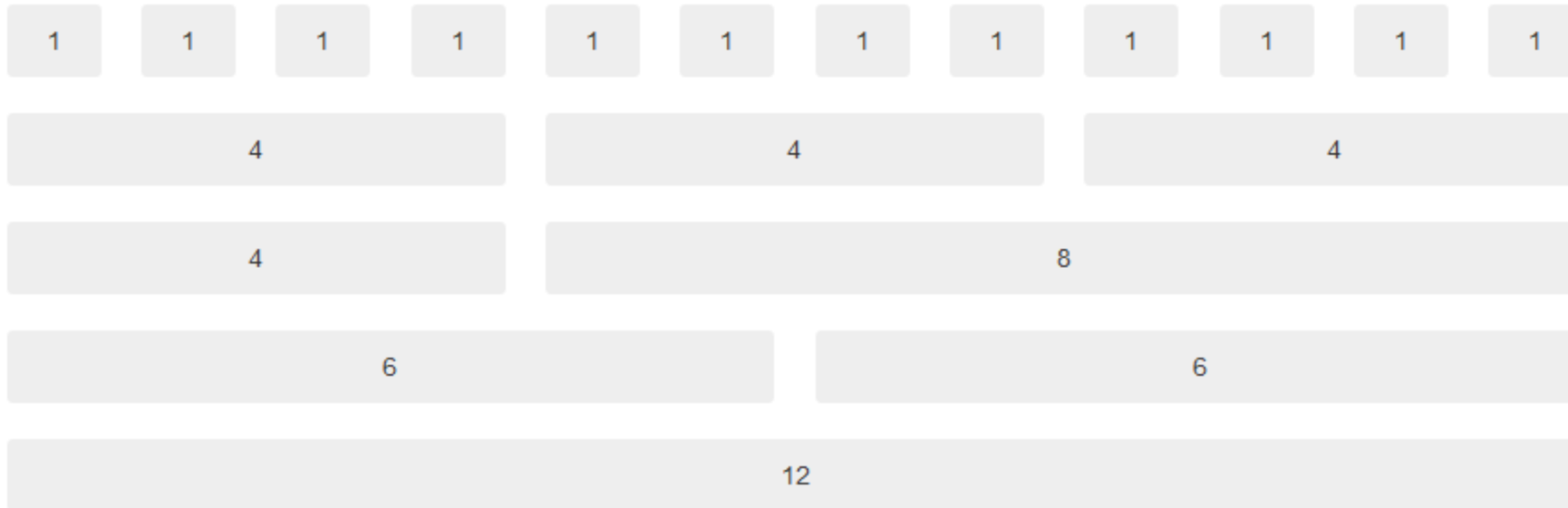
## Reason #4: Glyph Icon Set





# Why

## Reason #5: Grid System



- 960 Grid System <http://960.gs/>
- Blue Print CSS <http://www.blueprintcss.org/>
- Golden Grid System <http://goldengridsystem.com/>



# Why

## Reason #6: Components

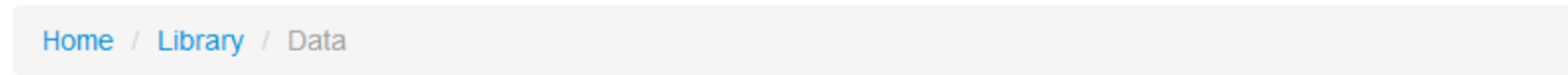
### ➤ Buttons:



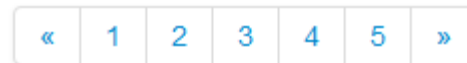
### ➤ Tabs:



### ➤ Breadcrumb:



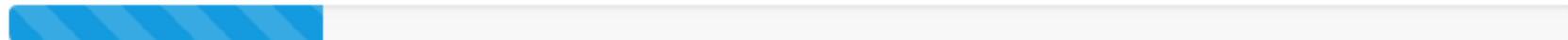
### ➤ Pagination:



### ➤ Alerts:



### ➤ Progress bar:



# Why

## Reason #7: Javascript/jQuery

☒ Transitions (required for any animation)

☒ Modals

☒ Dropdowns

☒ Scrollspy

☒ Togglable tabs

☒ Tooltips

☒ Popovers (requires Tooltips)

☒ Affix

☒ Alert messages

☒ Buttons

☒ Collapse

☒ Carousel

☒ Typeahead



# Why

## Reason #8: Customization

### Scaffolding

- ☒ Normalize and reset
- ☒ Body type and links
- ☒ Grid system
- ☒ Layouts

### Base CSS

- ☒ Headings, body, etc
- ☒ Code and pre
- ☒ Labels and badges
- ☒ Tables
- ☒ Forms
- ☒ Buttons

### Components

- ☒ Button groups and dropdowns
- ☒ Navs, tabs, and pills
- ☒ Navbar
- ☒ Breadcrumbs
- ☒ Pagination
- ☒ Pager
- ☒ Thumbnails
- ☒ Alerts
- ☒ Progress bars
- ☒ Hero unit
- ☒ Media component

### Miscellaneous

- ☒ Media object
- ☒ Wells
- ☒ Close icon
- ☒ Utilities
- ☒ Component animations

### Responsive

- ☒ Visible/hidden classes
- ☒ Narrow tablets and below (<767px)
- ☒ Tablets to desktops (767-979px)
- ☒ Large desktops (>1200px)
- ☒ Responsive navbar



- <http://balsamiq.com/products/mockups/>
- <http://www.mockplus.cn/>



# Getting up and running with Bootstrap



# Downloading and setting-up

## (Local Web Site)

In this section, we will learn how to:

- Download the Twitter Bootstrap source files
- Fix the URLs to make the Bootstrap site work in a 'local folder' on your computer
- Integrate the jQuery library



# Downloading the Bootstrap Files

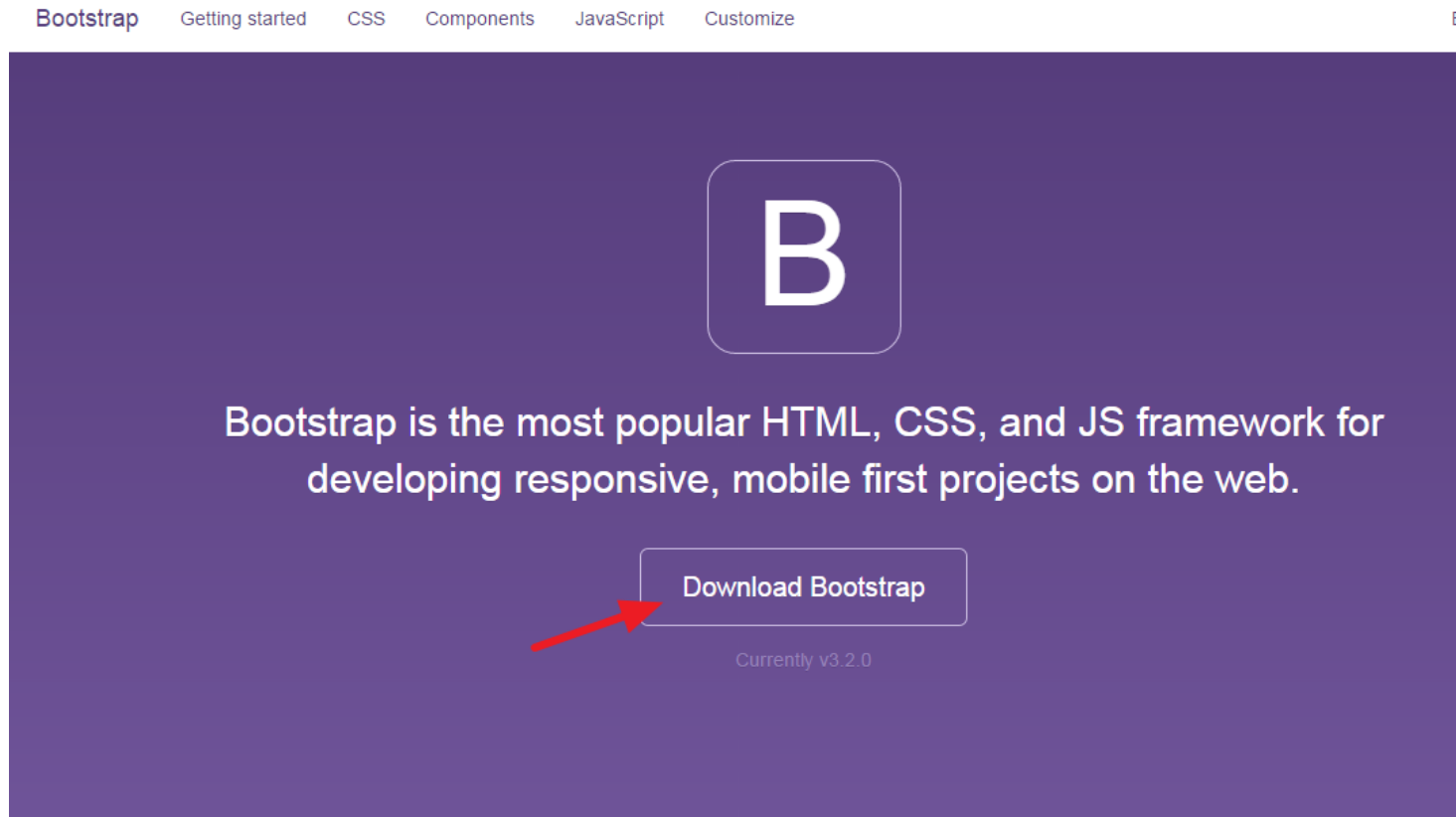
1. Create a **new folder** on your desktop
2. Go to [www.GetBootstrap.com](http://www.GetBootstrap.com)
3. Click on the large '**Download Bootstrap**' button
4. Save the file 'bootstrap.zip' in the **new folder** and unzip the file





# Downloading the Bootstrap Files-1

1. Go to [www.GetBootstrap.com](https://www.getbootstrap.com)



# Downloading the Bootstrap Files-2

## 2. Download bootstrap files

### Getting started

An overview of Bootstrap, how to download and use, basic templates and examples, and more.

### Download

Bootstrap (currently v3.2.0) has a few easy ways to quickly get started, each one appealing to a different skill level and use case. Read through to see what suits your particular needs.

#### Bootstrap

Compiled and minified CSS, JavaScript, and fonts. No docs or original source files are included.

Download Bootstrap

#### Source code

Source Less, JavaScript, and font files, along with our docs. **Requires a Less compiler and some setup.**

Download source

#### Sass

[Bootstrap ported from Less to Sass](#) for easy inclusion in Rails, Compass, or Sass-only projects.

Download Sass

### Bootstrap CDN

The folks over at [MaxCDN](#) graciously provide CDN support for Bootstrap's CSS and JavaScript. Just use these [Bootstrap CDN](#) links.

```
<!-- Latest compiled and minified CSS -->
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.2.0/css/bootstrap.min.css">

<!-- Optional theme -->
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.2.0/css/bootstrap-theme.min.css">
```

Copy



# Downloading the Bootstrap Files-3

3. Extract bootstrap files and copy the three folders to the directory "demo1"

## FOLDERS

### ▼ bootstrap

#### ▼ css

- bootstrap-theme.css
- bootstrap-theme.css.map
- bootstrap-theme.min.css
- bootstrap.css
- bootstrap.css.map
- bootstrap.min.css

#### ▼ fonts

- glyphicons-halflings-regular.eot
- glyphicons-halflings-regular.svg
- glyphicons-halflings-regular.ttf
- glyphicons-halflings-regular.woff

#### ▼ js

- bootstrap.js
- bootstrap.min.js



# Fixing the URLs to work locally

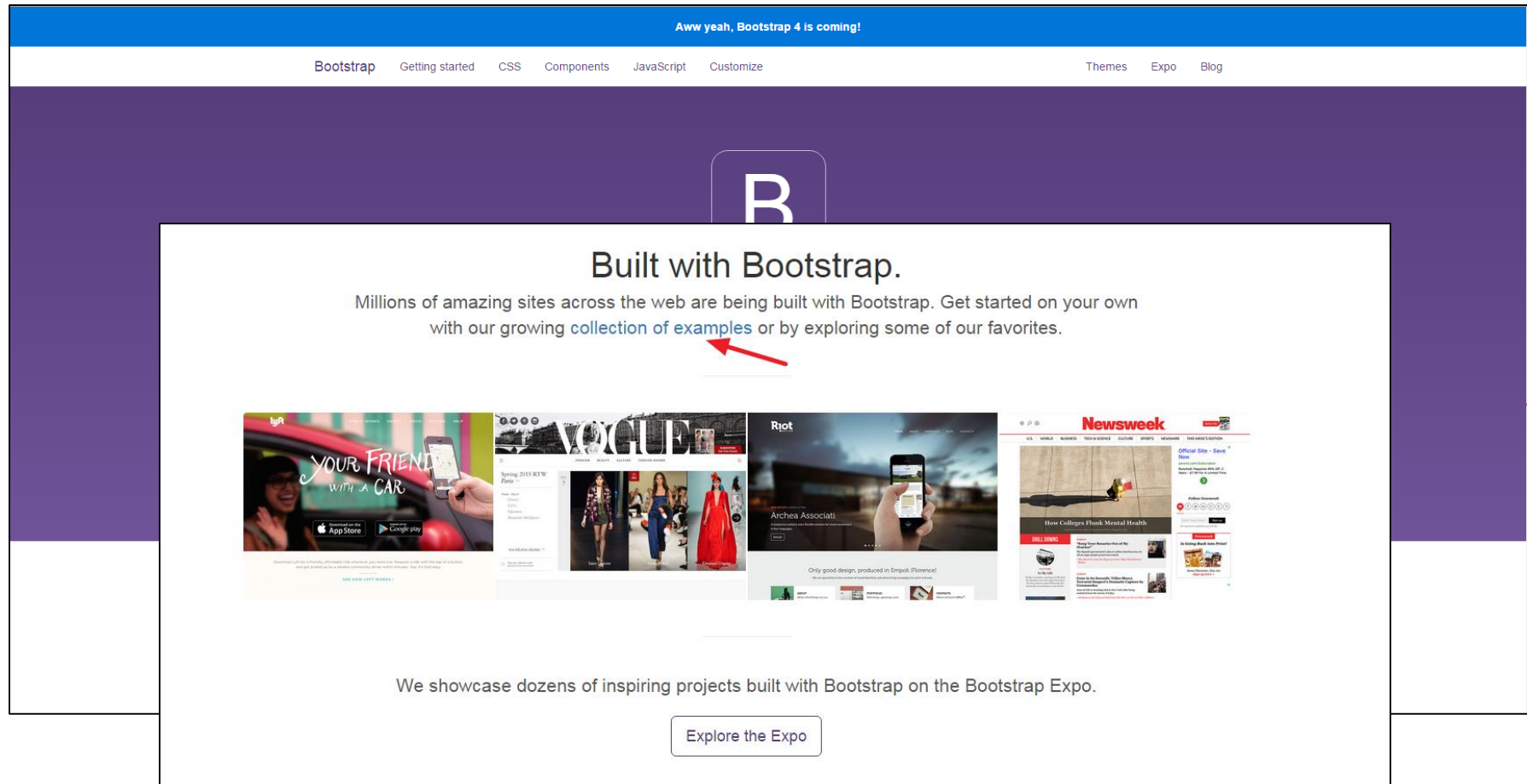
Set up Bootstrap to work within a local folder on your computer.

1. From page "**Get Started**", scroll down to 'Examples,' right-click on the '**Jumbotron**' and save it as **jumbotron.html**
2. Open '**jumbotron.html**' in your browser. Notice that the HTML displays, but the CSS is not integrated.
3. Open '**jumbotron.html**' in your text-editor.



# Fixing the URLs to work locally-1

1. Download **Jumbotron template as "jumbotron.html"**



# Fixing the URLs to work locally-1

## 1. Download **Jumbotron template as "jumbotron.html"**

### Examples

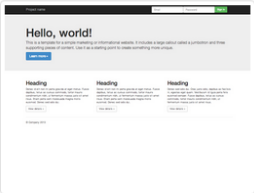
Build on the basic template above with Bootstrap's many components. We encourage you to customize and adapt Bootstrap to suit your individual project's needs.

Get the source code for every example below by [downloading the Bootstrap repository](#). Examples can be found in the [docs/examples/](#) directory.

### Using the framework


#### Starter template

Nothing but the basics: compiled CSS and JavaScript along with a container.




#### Bootstrap theme

Load the optional Bootstrap theme for a visually enhanced experience.



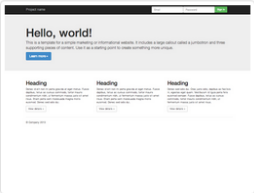
#### Grids

Multiple examples of grid layouts, including four tiers, nesting, and more.




#### Jumbotron

Build around the jumbotron with a navbar and some basic grid columns.



#### Narrow jumbotron

Build a more custom page by narrowing the default container and jumbotron.



### Project name

Email Password Sign in

# Hello, world!

This is a template for a simple marketing or informational website. It includes a large callout called a jumbotron and three supporting pieces of content. Use it as a starting point to create something more unique.

[Learn more »](#)

## Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

[View details »](#)

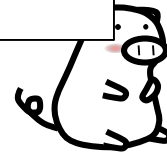
## Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

[View details »](#)

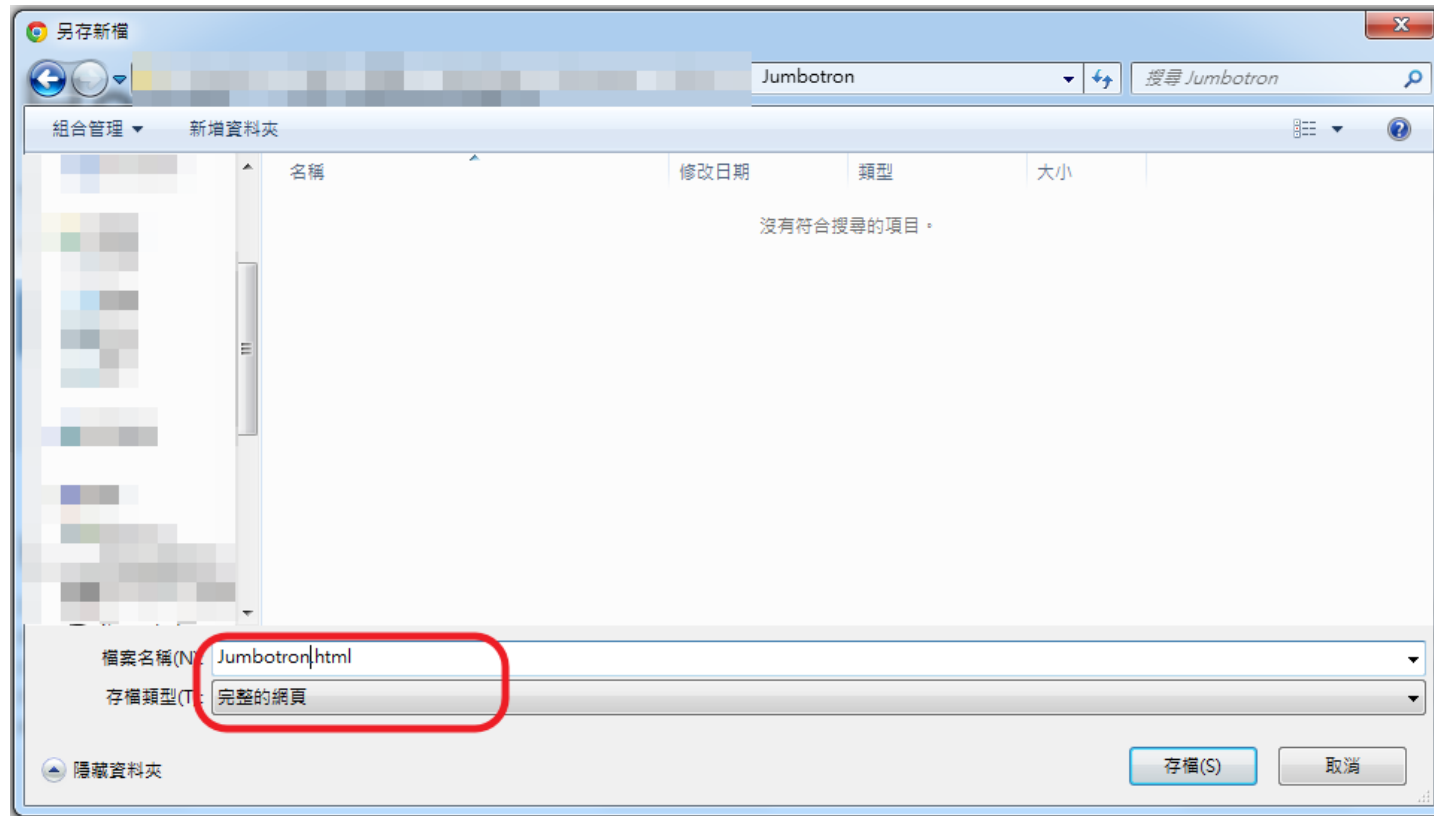
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上一頁(B) Alt+向左鍵  
下一頁(F) Alt+向右鍵  
重新載入(R) Ctrl+R  
另存新檔(A)... Ctrl+S  
列印(P)... Ctrl+P  
翻譯成中文(繁體)(T)  
檢視網頁原始碼(V) Ctrl+U  
檢視網頁資訊(I)  
保存為未知筆記  
新開文書  
Adblock  
Evernote Web Clipper  
檢查元素(N) Ctrl+Shift+I



# Fixing the URLs to work locally-1

1. Download **Jumbotron template as "jumbotron.html"**



# Fixing the URLs to work locally-2

2. Move **"jumbotron.html"** to **"demo1"**
3. Move **"jumbotron.css"** to **"demo1/css"**
4. Move all **"\*.js"** files to **"demo1/js"**

[Project name](#)

## Hello, world!

This is a template for a simple marketing or informational website. It includes a large callout called a jumbotron and three supporting pieces of content. Use it as a starting point to create something more unique.

[Learn more »](#)

### Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

[View details »](#)

### Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

[View details »](#)

### Heading

Donec sed odio dui. Cras justo odio, dapibus ac facilisis in, egestas eget quam. Vestibulum id ligula porta felis euismod semper. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus.

[View details »](#)

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# Fixing the URLs to work locally-2

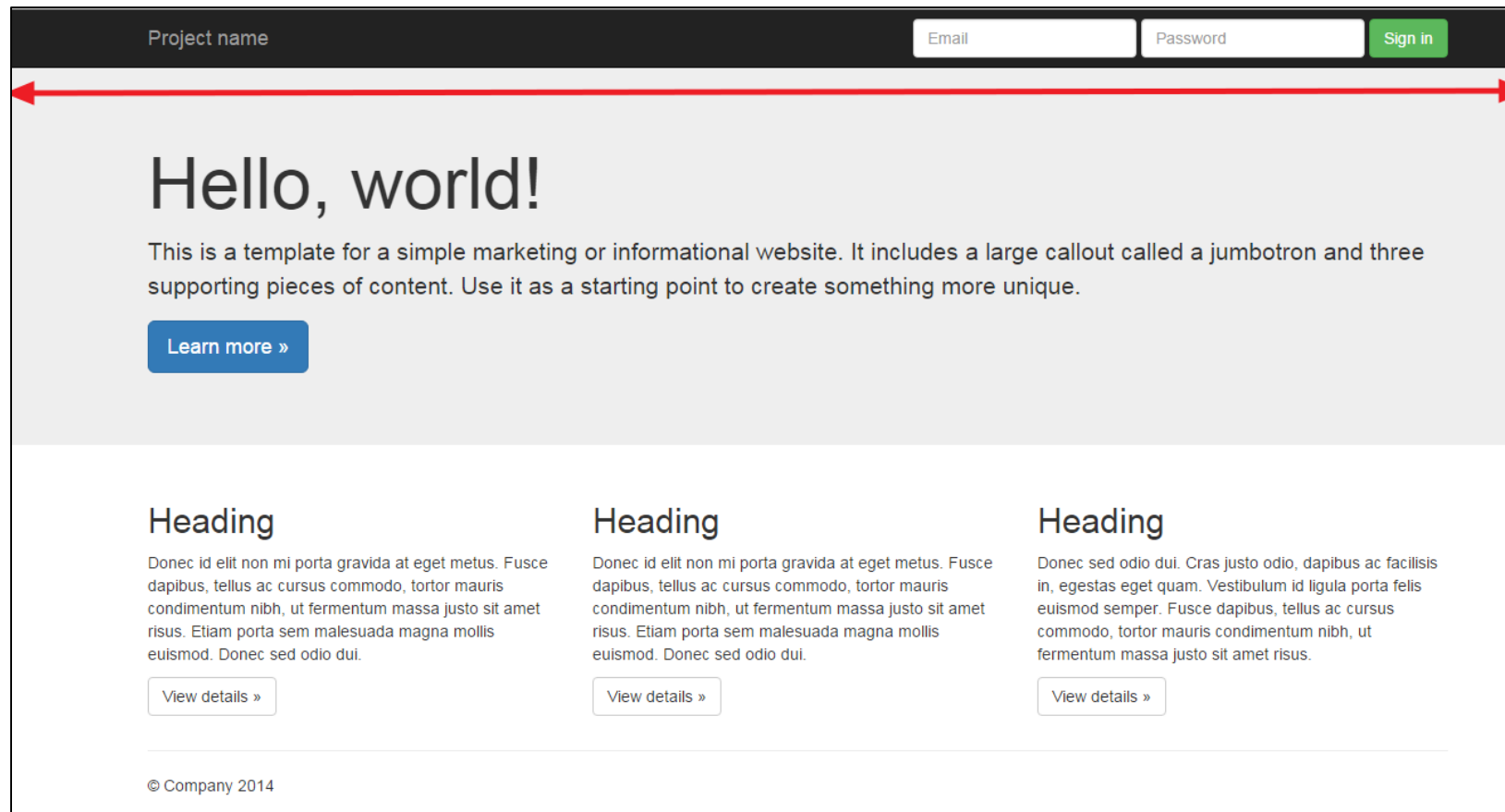
5. In your text-editor, fix the URLs to work locally by

- renaming all **css** files' path from '**Jumbotron\_files**' to '**css**', and
- renaming all **js** files' path from '**Jumbotron\_files**' to '**js**'.



# Fixing the URLs to work locally-2

6. Stretch and shrink the width of your browser.





**SIDEBAR**

Link

Link

Link

Link

**SIDEBAR**

Link

Link

Link

Link

Link

Link

**SIDEBAR**

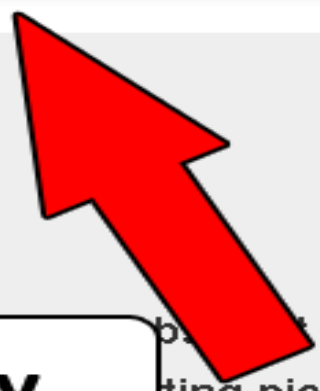
Link

Link

Link



# Hello, world!



**A good test to see if the jQuery and the Bootstrap JavaScript files are linked correctly is to test the navigation menu to see if the drop-down is working.**

## Heading

## Heading

## Heading

Donec id elit non mi porta gravida et eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris tempus imper.

Donec id elit non mi porta gravida et eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris tempus imper.

Donec id elit non mi porta gravida et eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris tempus imper.



# Additional set-up notes

There are two pieces of code that appear in the example Bootstrap HTML files that you should take note of and understand their purpose:

1. The '**meta viewport**' tag in the head of the doc; and
2. The '**HTML5 shim**' (a.k.a. '**HTML5 shiv**')



# The 'meta viewport' tag

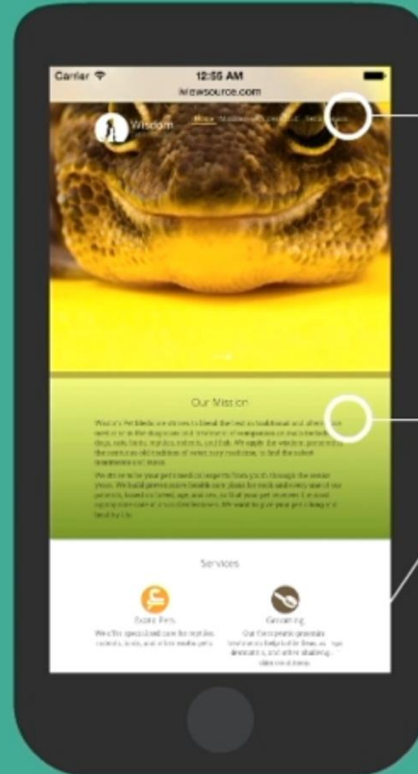
In the head of the Bootstrap example HTML file, you will notice the following code:

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

**Short explanation:** this code is 'a fix to control iOS's scaling behaviour' when iOS devices rotate between portrait and landscape.



# Without viewport tag



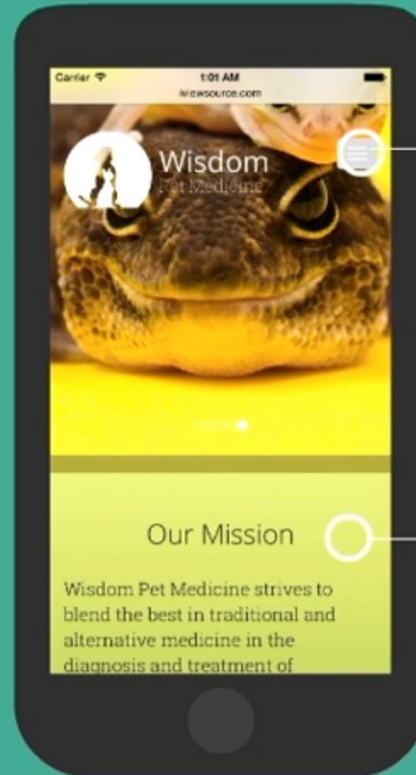
displays wrong  
breakpoint

fonts too small

**mobile device**  
(without viewport tag)



# With viewport tag



proper CSS  
breakpoint

fonts are easier  
to read

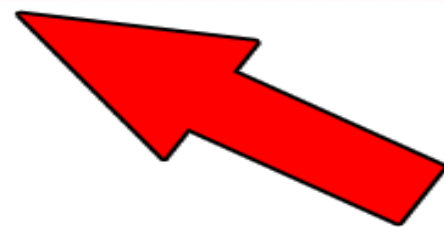
**mobile device**  
(with viewport tag)



```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8">
    <title>Bootstrap, from Twitter</title>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <meta name="description" content="">
    <meta name="author" content="">

    <!-- Le styles -->
    <link href="css/bootstrap.css" rel="stylesheet">
    <style type="text/css">
      body {
        padding-top: 60px;
        padding-bottom: 40px;
      }
      .sidebar-nav {
        padding: 9px 0;
      }

      @media (max-width: 980px) {
        /* Enable use of floated navbar text */
        .navbar-text.pull-right {
          float: none;
          padding-left: 5px;
          padding-right: 5px;
        }
      }
    </style>
  </head>
  <body>
    <div class="navbar navbar-inverse">
      <div class="container">
        <div class="navbar-header">
          <button type="button" class="navbar-toggle" data-toggle="collapse" data-target="#navbar-collapse">
            <span class="sr-only">Toggle navigation</span>
            <span class="icon-bar"></span>
            <span class="icon-bar"></span>
            <span class="icon-bar"></span>
          </button>
          <a href="#" class="navbar-brand">Bootstrap</a>
        </div>
        <div id="navbar-collapse">
          <ul class="list-unstyled">
            <li><a href="#">Home</a></li>
            <li><a href="#">About</a></li>
            <li><a href="#">Contact</a></li>
          </ul>
        </div>
      </div>
    </div>
  </body>
</html>
```





# basic bootstrap template

```
<!DOCTYPE html>
<html>
  <head>
    ...
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link href="./css/bootstrap.min.css" rel="stylesheet">
    <link href="./css/jumbotron.css" rel="stylesheet">

  </head>

  <body>
    ...
    <script src="./js/jquery.min.js"></script>
    <script src="./js/bootstrap.min.js"></script>
  </body>
</html>
```



# Gird System

- 12-column grid
- Access through CSS classes
- Three key issues
  - Containers
  - Rows
  - Columns



# Containers

- Control layout
- Add padding
  - 15px each side
  - Element inside would not reach the side
- Two types
  - Fluid (always adjust to the size of the device)
    - .container-fluid
  - Fixed-Width(depends on the size of device, show fixed size)
    - .container



# Fixed-Width Container

- 15 pixels padding on each side
- Adjust to media query breakpoints

	Extra Small <768px	Small ≥768px	Medium ≥992px	Large ≥1200px
Width	Auto	750px	970px	1170px



- Download and extract zip file "[demo.container.fluid.src.zip](#)".
- Add a "div" with class "container-fluid" to contain the "h1" and "p".



# Headline

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ab libero, cupiditate veniam officiis itaque in porro iure fugit iusto reprehenderit commodi earum cum blanditiis quos error similique quod, facere! Hic.



Add a "DIV" with class "container-fluid" to contain the "h1" and "P".

```
<div class="container-fluid">  
  <h1>Headline</h1>  
  <p>...</p>  
</div>
```



# Headline

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Ab libero, cupiditate veniam officiis itaque in porro iure fugit iusto reprehenderit commodi earum cum blanditiis quos error similique quod, facere! Hic.



# Headline

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Clone the fluid "div" and modify its class to "container"

```
<div class="container">  
  <h1>Headline</h1>  
  <p>...</p>  
</div>
```

```
<div class="container-fluid">  
  <h1>Headline</h1>  
  <p>...</p>  
</div>
```



# Headline

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Ab libero, cupiditate veniam officiis itaque in porro iure fugit iusto reprehenderit commodi earum cum blanditiis quos error similique quod, facere! Hic.

div.container 970px × 119px

# Headline

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Ab libero, cupiditate veniam officiis itaque in porro iure fugit iusto reprehenderit commodi earum cum blanditiis quos error similique quod, facere! Hic.



Add "header" before the two "div"s

```
<header class="bgimage">  
  <div class="container">  
    <h1>Headline</h1>  
  </div>  
</header>  
<div class="container">  
...  
<div class="container-fluid">
```



# Headline

# Headline

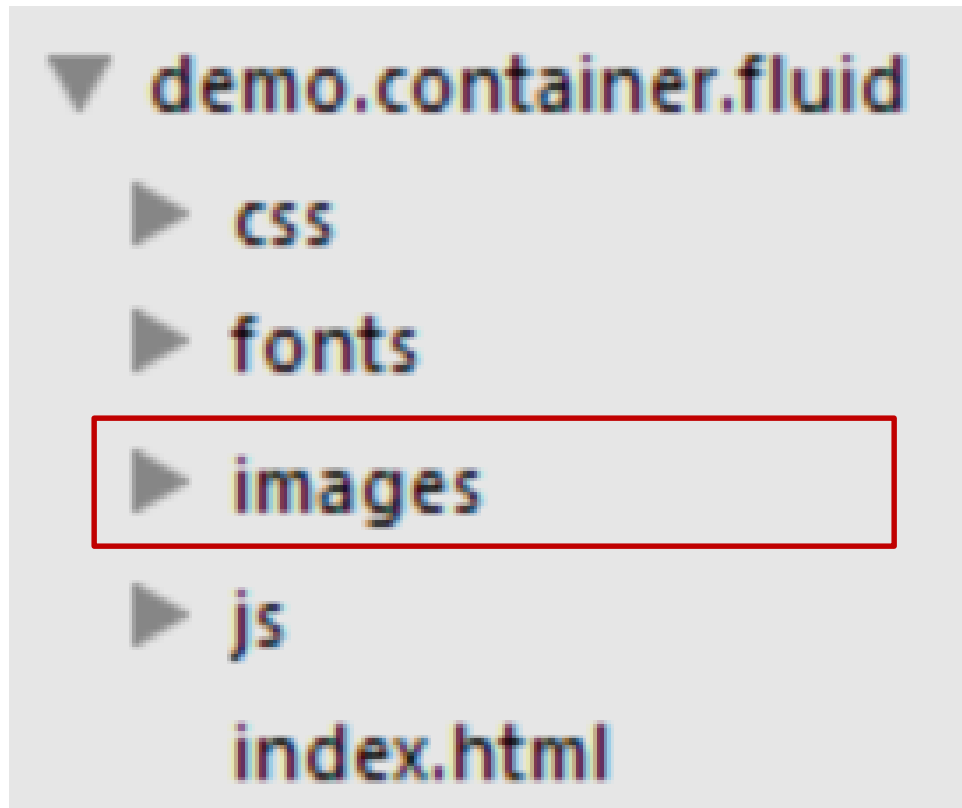
Lorem ipsum dolor sit amet, consectetur adipisicing elit. Ab libero, cupiditate veniam officiis itaque in porro iure fugit iusto reprehenderit commodi earum cum blanditiis quos error similique quod, facere! Hic.

# Headline

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Ab libero, cupiditate veniam officiis itaque in porro iure fugit iusto reprehenderit commodi earum cum blanditiis quos error similique quod, facere! Hic.



# Create subfolder "images" and add one picture



- <http://bossfight.co/>



# Create css/styles.css (save firstly)

```
.bgimage{  
    background-image:  
        url("../images/?????.jpg");  
    background-position: center center;  
    background-size: cover;  
    height: 200px;  
}
```

1. Path is relative to style.css
2. Replace with your image's file name



# background-size: cover;

- CSS 3背景新屬性：background-size
- 指定背景圖片大小
- **cover**主要用於背景圖小於所在的內容，而背景圖又不適合使用repeat，此時就可以採用cover的方式，使背景圖放大至內容的大小，但此方法容易使背景圖因放大而失真。



# Headline

# Headline

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Ab libero, cupiditate veniam officiis itaque in porro iure fugit iusto reprehenderit commodi earum cum blanditiis quos error similique quod, facere! Hic.

# Headline

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Ab libero, cupiditate veniam officiis itaque in porro iure fugit iusto reprehenderit commodi earum cum blanditiis quos error similique quod, facere! Hic.

